

1. (Amended) An endosomal lysing agent comprising a compound having one or more hydrolyzable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyls and wherein said compound is capable of effecting the lysis of an endosome in response to a change in pH.

5. (Amended) An endosomal lysing agent comprising a compound having one or more hydrolyzable functional moieties and one or more ionizable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyl, and wherein said compound is capable of effecting the lysis of an endosome in response to a change in pH.

14. (Amended) The endosomal lysing agent of claim [13] 1 or 5, wherein each of said ortho-ester containing monomers is selected from the group consisting of N-[2-methyl-1,3-O-ethoxyethylidene-prpanediol]methacrylamide, ortho-ester derivatives of tartaric acid, ortho-ester derivatives of treitol, and ortho-ester derivatives of dithiothreitol.

17. (Amended) A biocompatible composition comprising:
a packaging agent, characterized by an ability to bind to a therapeutic agent and mediate import into endosomes; and
a lysing agent comprising a compound having one or more hydrolyzable functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-actonyl and wherein said compound is capable of effecting the lysis of an endosome in response to a change in pH.

32. (Amended) A cell delivery composition comprising:
a compound to be delivered to a cell;
a delivery agent bound to the compound; and
an endosomolytic agent of claim 1 or 5 [comprising a compound capable of effecting the lysis of an endosome in response to a change in pH].

39. (Amended) A method of lysing an endosome, the method comprising the steps of:

providing a composition for endosomal uptake into the cell; and
contacting the composition with the cell in the presence of an endosomal lysing agent
having one or more hydrozable functional moieties selected from the group consisting of ortho-
esters, hydrazones, and cis-actonyls and wherein said agent is capable of effecting the lysis of an
endosome in response to a change in pH.

42. (Amended) A method for introducing a [therapeutic agent] nucleic acid into a cell or a
subcellular component, the method comprising the steps of:

providing a biocompatible delivery composition comprising:

a packaging agent;

an endosomal lysing [component] agent having one or more hydrozable
functional moieties selected from the group consisting of ortho-esters, hydrazones, and cis-
actonyls and wherein said agent is capable of effecting the lysis of an endosome in response to a
change in pH; and

a nucleic acid; and

contacting the composition with cells.

Please cancel claims 13, 33, 34, 36-38, 40, and 43 without prejudice.

Remarks

Claims 1-45 are pending in the application. Claims 1-45 stand rejected. Claims 1, 5, 14,
17, 32, 39, and 42 are amended as above. Claims 13, 33, 34, 36-38, 40, and 43 have been
canceled. No new matter is added to the Specification by these changes. Applicant respectfully
requests reexamination and reconsideration of the case, as amended. Each of the rejections
levied in the Office Action is addressed individually below.